

# Minerals & Power Resources in South Asia

## Minerals of India

### Introduction:

Minerals form the basis of the industrial development of a country. India is fortunate to have rich deposits of some essential minerals. There are large resources of Iron ore, mica, manganese ore, magnesite, bauxite and thorium. India is not only self sufficient in the production of basic minerals such as iron ore, coal, but also exports large amount of these minerals to other countries, but minerals of power resources such as mineral oil or natural gas are not found according to its requirements.

India has to import enough amount of mineral oil and its products from other countries. Although the shortage of mineral oil and its products have been tried to fulfill by the use of coal, Hydro electricity or atomic electricity. Thus detail of power resources found in India are as follows:

### Coal:

Coal is considered the cheaper source of power if used near the coal mines. Being bulky its transportation over long distances involves high costs. Therefore industries which consume a large quantity of coal are located near coal mines. Coal is used as a source of power for running machines, trains, ships and dynamos. Besides it is essential for the manufacture of iron and steel, and a variety of chemicals.

Coal Tar and chemicals such as ammonia, benzol, etc., is obtained as by products from the gases which are given off, when suitable coal is burn in closed chambers to get hard coke or metallurgical coke used in the manufacture of iron and steel. As a source of direct heat it is used for domestic purposes, in the manufacture of potteries and building materials like cement burning of bricks and tiles and in iron and brass foundries etc., However different grades of coal are used in iron and steel industries

and steam generation, inferior coal are utilized mainly for potteries bricks and burning. The details of coal mining areas of India are as follows:

## (1) Coals Mines in Bihar state:

In India state of Bihar is the leading coal producer although coal is also found in the states of west Bengal, Andhra Pradesh, Madhya Pradesh and orissa, but the areas of Bihar and West Bengal known as Damoder valley are famous for the superior quality coal. Coal mines of Bihar state are as follows:

### (i) Jharia Mines:

The biggest coal mine of India is situated at the place of Jharia in Bihar state. The coal mines of Jharia are lying about 200 km. northwest of Colcutta, and about 24 km. west of Ranijang. These coal mines have covered about 225 sq. miles area. About half of the superior quality coal of India is found from these mines. The layer of coal in these mines are found up to the depth of two thousand feet. Jharia coal mines have been connected with eastern railway system of India. The Jharia coal mines having good quality of coal and nearness of industrial area maintain important position. These mines fulfill the requirements of coal for industries lying from Delhi to Colcutta.

### (ii) Bokaro Mines:

These coal mines are situated near the place of Bokaro in the west of Jharia coal mines. A good quality coal is taken from these mines. Due to availability of good quality coal a large iron and steel mills have been set up at this place.

### (iii) Karanpura Mines:

These coal mines are found in the north and south of Karanpura. These mines cover about an areas of 650 km. Although at present small amount of coal is being extracted from these mines. It has been reserved for future requirements.

### (iv) Giridih Mines:

Though these coal mines have been recently discovered and a small quantity of coal is being taken from these mines, but due to the superior quality it is mostly used for the melting of the iron ore.

## 2) Rani Ganj Mines (West Bengal):

Indian state of West Bengal at the place of Ranijang extracting of coal started in British Era before independence. So these are known as the oldest coal mines of India.

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These coal mines cover about 900 sq. miles of the area. The average of the mines of these areas are 150 to 250 meters, but in some mines the coal layers go up to 2000 feet deep. Thus these are also considered the deepest mines of India. About  $\frac{2}{3}$  of India's coal production is taken from these mines. These mines have been connected with the eastern rail system of India.

### Coal Mines of Madhya Pradesh state:

The state of Madhya Pradesh ranks third position in coal producing states of India. In this state Sohagpur, Kerala, Korba, Garh, Rewa and Pench valley enough amount of coal is extracted, but the biggest coal producing center of this state is known as Sohagpur. These coal mines cover about 2200 km. Korba mines covers an area of about 300 km. The quality of coal being inferior it is used in various other industries.

### Coal Mines of Andhra Pradesh State:

The state of Andhra Pradesh gets fourth position among the coal producing states of India. The coal is extracted from the mines of Kothagudam, Tandur and Yellandlapad. The quality being poor mainly used for railway and other industries of South India.

### Lignite and peat quality Coal:

These coal fields are of tertiary nature, which were formed much later than the former. These coals have very low qualities and less characteristics of coal. It is found in the Jharkhand district of Assam, Sivasagar in districts of upper Assam valley and in the Garo, Khasi and Jaintia Hills. Small quantity of lignite is also mined at Palana about 210 km. away from Bikaner town in Rajasthan state.

Besides large deposits of lignite are located at Neyveli in South Arcot district of Tamil Nadu. It is a newly opened mine. A thermal power station commissioned at Neyveli is based on the lignite type of coal.

Coal has also been found in Jammu Province of Jammu and Kashmir state. The coal fields are located close to the Chenab River. At present a small quantity of coal is being extracted from these mines.

### Petroleum or Mineral Oil

Crude petroleum also known as mineral oil or crude oil, occurs in the marine sedimentary rocks generally porous rocks namely Sand stone, lime stone and shale. It is found in the oil fields of Assam, Gujarat and Rajasthan. Petroleum has already become an indispensable resource in the economy of India as it supplies about 48% per cent of commercial energy. Automobiles, airplanes,

tractors, and Tube wells for agriculture, mechanization in mining, chemical industries and power production would be Paralyzed without the supply of petroleum.

Despite the discoveries and opening of many new oil-fields after independence. India is still dependent on import to meet about two-thirds of her requirement. To meet rapidly by increasing demand of mineral oil for her industries India has to import large amount of crude oil from Russia, UAE, Saudi Arabia, Iran and etc.

Before 1975 the extracting and trade of mineral oil was in the hands of private sector. But after nationalization the search and refining work of crude oil / Gas are being performed by the oil and gas commission of India and oil India limited which are working for the search of mineral oil in various part of India. Similarly another company India Oil Corporation is performing refining of imported crude oil. the crude oil found in various parts of India are as follows:

### **(i) Mineral Oil in Assam state:**

In India mineral oil was first discovered in 1953 at Digboi in north east of Assam state. It is considered the oldest oil field of India. The Assam oil company had discovered it at Nahorkatiya and Moran in 1956. In this areas search and refining of crude oil were performed by the Assam oil company, but in 1975 after nationalization this work has been handed over to public sector.

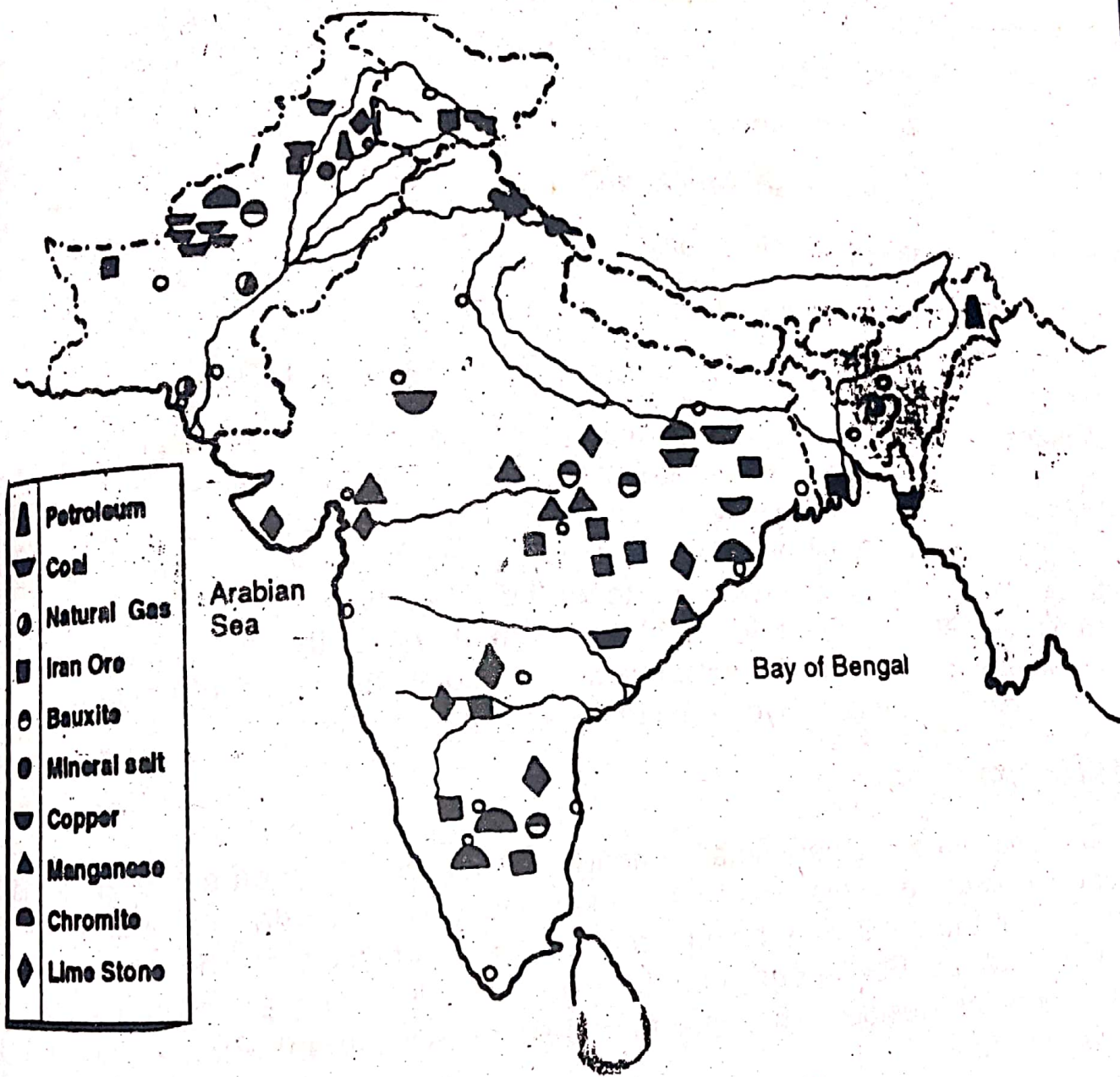
### **(ii) Mineral oil in Gujrat State:**

A new oil field was discovered in the Coastal strip adjoining the northern & eastern Coast of the Gulf of Cambay in July 1958. At about 80 km. South of Baroda city at Anklesvar the biggest oil field of this state has been discovered, besides here crude oil and natural gas has also been found in large quantity.

In this state another oil field about 24 km. South of Ahmedabad at Nawagam has also been discovered recently, besides, above some crude oil and natural gas has also been found at Sobhasan, Sanand and Kadi.

The crude oil of the oil fields of Gujrat state is refined in a refinery located at Koyali (near Baroda). The oil fields of Gujrat State produce about half of crude oil production of India.

# Minerals of South Asian Countries



### **(iii) Mineral Oil Near the Coast of Mumbai:**

There are few off shore structures in the Gulf of Cambay. One of these known as Mumbai High lies 120 km. northwest of Mumbai in the Gulf of Cambay. The production of oil from this area started in 1974 besides oil has also been found in the Bassein structure at a place lying about 70 km. west of Bassein. The crude oil is refined near Mumbai.

There are at present about 13 refineries in India, from which:

- Digboi, Gauhati, Neenmati (Assam),
- Barauni (Bihar),
- Koyali (Gujrat) Near Mumbai,
- Haldia (West Bengal),
- Channai (Tamil Nadu),
- Trombay Vishakha Patnem, Cochin, Methura (U.P).

In all these refineries local and imported crude oil is refined. The recent developed refinery at Methura in (U.P) is the biggest refinery of India in Public sector. This refinery has been connected with a pipeline from the Mumbai high oil field area, and it will be able to refine about 60 million tonnes of crude oil every year. The refinery will fulfill the crude oil products requirements of northern India. Although the requirement of crude oil products has increased to much as compared to the local production, the government is working on various projects to reduce the import of crude oil such as use of Alcohol oil from coal Hydro-electricity and Atomic energy.

### **Natural gas:**

Natural gas is found in a very small quantity in India. In 1961, some deposits of natural gas and oil have been discovered at Ankleshver near Baroda in Gujrat states. The natural gas of these fields is being used for the production of Thermal electricity. Utran and Dhwaran, Few deposit of natural gas has also been discovered at Nawaga near Ahmedabad. Besides few deposits at Jeslmir (Rajasthan) Jowala Mukhi (Punjab) has also been found.

## **Electricity in South Asia**

**Introduction:** Electricity serves man in many ways. Like steam and petroleum provided energy to machines. It is also used for refining certain metals and producing light and heat without smoke. In fact it is the most versatile form of energy. Electricity is generated by a machine called Dynamo. Steam-engine oil-engine and water falls turn the dynamo for the generation of electricity. In some countries nuclear

Water the latest source of energy is being utilized for developing electricity. In most of South Asian countries coal or water are used for the generation of electricity. The electricity produced by the use of coal, oil or gas is known as Thermal electricity, but electricity produced by the help of water is called Hydro electricity. Thus the detail electricity produced in South Asian countries is as follows :

**Electricity in India:** India has made a commendable progress in the development of electricity since independence. The total electricity at present generated by public utilities for about 22 times of that generated at the time of independence. From the total electricity by public utilities about 56.4% was accounted for thermal plants, about 41.2% by hydro plants and about 2.4% by Nuclear plants.

### Hydroelectricity in India

India is fortunate to have a large potential of Hydro-electricity. It is estimated about 15 million kW, at 60% load factor. At present India had exploited only about 23.0% of the total Hydro-electric potential. It means that India can look hopefully towards water as a potential source of power. Water power potential is quite evenly distributed over the total Hydro-electric potential of India. Rivers of Assam, Arunachal Pradesh, Jharkhand, Manipur and Tripura accounts for about 30.4%. According to experts in the field of Hydro electricity the states of India are numbered as:

- |                    |                    |                      |
|--------------------|--------------------|----------------------|
| 1) Assam           | (2) Madhya Pradesh | (3) Uttar Pradesh    |
| 2) Jammu & Kashmir | (5) Karnataka      | (6) Andhra Pradesh   |
| 3) Orissa          | (8) Maharashtra    | (9) Himachal Pradesh |
| 4) Kerala          | (11) Punjab        | (12) Manipur         |
| 5) Tamil Nadu      | (14) Gujarat       | (15) Rajasthan       |
| 6) West Bengal.    |                    |                      |

### Generation of Hydro electricity:

It is not necessary that a region with high Hydro-electric potential should also lead other regions in the generation of Hydro-electric power. Many factors influence the selection of the sites for power generation.

The principal factors are:

- (1) Character of the river valley and the waterfall.
- (2) Volume of water.
- (3) Distance of the market
- (4) Size of the market
- (5) Non-availability of other sources of power.

### (9) Rihand Hydel Project (Uttar Pradesh):

Near Peri village on river Rihand a 915 meter high dam has been built and about 1200 M.W of electricity is being provided to the industrial areas of Uttar Pradesh state.

### (10) Hydroelectric Projects of Chambal River:

To provide water for irrigation and electricity to the states of Rajasthan and Madhya Pradesh the work on Chambal river valley project started in 1953-54. Three dams have been built on Chambal river between the places Chorasigarh and Form Gandhi Sagar dam about 115 M.W from Rana Partap Sagar dam at Rawat about 172 M.W electricity is being produced. The third dam on Chamble River at near from where about 99 M.W electricity is providing electricity to the various areas of Rajasthan state.

### (11) Hydel Projects of Western Ghat:

Near Mumbai water in the about 65 meters high dams is stored from where brought to Bhopori Khopali and Bhera through pipes, from where about 276000 M.W electricity is being produced, which is providing the electricity needs of Mumbai city.

### (12) Koyna Hydel Project:

In the Maharashtra state on river Koyna near the place of Kurad a dam has been built and about 780 M.W of electricity is providing the Mumbai industrial area.

### (13) Hydel Projects of Tamil Nadu:

The hilly areas of this state due to heavy rainfall are suitable for the production of electricity. So at Kandha, Mytor, Braji Kolam, Per Pyar, Kodayar, Shopayar, about 1000 M.W of hydel power is obtained.

### (14) Hydel Projects in Jamuna and Kashmir State:

Three hydel projects near Srinagar, Mohana, Ganderyal and Samble are producing hydroelectricity.

### Thermal Electricity in India:

In all the coal producing states of India, coal is used for the production of electricity. In the states of west Bengal, Bihar, East Uttar Pradesh Orissa and Madhya Pradesh thermal power is being produced by the use of coal. In some states diesel or Furnace oil is used for the production of thermal electricity. The thermal electricity producing states of India are:

- |                  |                     |                     |            |
|------------------|---------------------|---------------------|------------|
| (1) Maharashtra, | (2) Madhya Pradesh, | (3) Andhra Pradesh, | (4) Delhi, |
| (5) West Bengal, | (6) Gujrat,         | (7) Tamil Nadu,     | (8) Bihar. |



## Nuclear Electricity:

Most of the areas of India suffer from Chronic shortage of Power. In order to meet the need of the existing industrial units and to encourage the more industries in this over populated country. It is being planned to use nuclear power for the generation of electricity. The following nuclear power stations have been established in various parts of India.

### 1) Tara Pur Nuclear Power station:

The first nuclear power station of Thana was established at Tarapur in district thana near Mumbai about 420 M.W electricity is being provided to the industrial area of Mumbai. It was completed in 1969.

### 2) Rana Partap Sagar Nuclear power station:

This is second nuclear power station of India, built in Rajasthan state. It was completed in 1972 and it is producing about 220 M.W of electricity. It is providing the need of electricity for Rajasthan state.

### 3) Kalpakkam Nuclear power station (Tamil Nadu) :

This is the third nuclear power plant of India. It has been built near Kalpakkam in the state of Tamil Nadu. It is producing about 470 M.W of electricity.

Two more nuclear power stations are being set up at Narora in Uttar Pradesh and Akra par near Surat in Gujrat states.

## Minerals in Pakistan

### Introduction:

Pakistan is rich in its mineral resources, but these potentials remained unexplored, over the years. The absence of risk capital inadequate institutional frame-work and industrial capacity to absorb minerals produce, are among the factors which have kept dormant. Now the government is adopting new policy measures to give a boost to this section. Although the use of mineral is increasing every year in our country, and Pakistan is not self sufficient in the requirements of minerals and has to import enough amount of various minerals from other countries. The various minerals found in our country are:

### Iron ore:

Iron ore has been found in various areas of our country. It has been found near Jhokar Bakkar and Kalabagh district Mianwali (Punjab), At about 20 miles from Drosh in Southern Chitral (NWFP) high quality iron ore deposits have been found some iron ore

at Langrial Galdanian near Abottabad is also found. Besides few deposits of iron are located near Chalghazi in Chaghi district of Balochistan Province.

At present iron ore in our country is not being mined commercially, because the quality being poor. It is not suitable for a big or medium size steel mill, Pakistan steel mill using imported iron ore.

**2. Chromite:** It is also an important mineral of our country. Huge deposits of chromite are found at Muslim Bagh in Zoab valley of Balochistan. The mines of J. Torgrh and Khanozai. Besides, these some Chromite deposits have also been found in areas of Chaghi and Kharan districts of Balochistan Province. A few deposits of Chromite have also been found in Malakand and Mahamand Agencies of NWFP.

**3. Rock Salt:** Salt is considered one of the largest minerals found in our country. It is found at Khewara district Jhelum, Warcha district Khushab and Kalabagh in Mianwali district. Beside some amount of salt is also found near Bahawalpur in Kohat district (NWFP).

Pakistan is not only self sufficient in the production of salt, but also exports enormous quantity of salt to various countries.

**4. Gypsum:** It is found in the areas of Jhelum, Mianwali and Dera Ghazi Khan districts of Punjab, Quetta and Sibbi in Balochistan and Kohat districts in N.W.F.P. used for the manufacture of cement and various other industries.

**5. Sulphur:** Its deposits are found at extinct Volcano, Koh-i-Sultan in Chaghi districts of Balochistan province. Besides some Sulphur deposits have also been found at Sanni district Kachi of Balochistan province. Our country is not self sufficient in the production of Sulphur and has to import Sulphur from other countries.

**6. Copper:** The deposits of copper have been found at Saindak and Amurek in Chaghi districts of Balochistan province. At present copper is not being extracted commercially in our country.

**China Clay:** The deposits of china clay have been found at Shahdara district Swat and Tamar Garh near Dir in NWFP. Few deposits of China clay have also been found at Nagar Parker in district Tharparker of Sindh province. Our country is not self sufficient in the production of China clay. We have to import enough quantity of china clay from various countries.

**8. Marble:** In various parts of our country good quality marble in wide range of colors is found. The best deposits are located at Mullaghori near Peshawar in the Khyber Agency. Besides Maneri, Gundai hills in Mardan, Nowshera and Swat in N.W.F.P are famous centers. Some important deposits are also found at Kala-Chitta range in Attock district of Punjab province. A few deposits of good quality marble is also found in Chaghi district of Balochistan province. A large amount of marble and marble goods are exported to various other countries.

Besides the above in our country few deposits of Bryte, Magnisite, Lime stone, Silica Sand and Bauxite are also found.

### Power Resources:

#### Coal:

In the Province of Punjab coal is found in districts of Khushab and Jhelum in Salt range at the places of Dandot, Pidh, Ara Katha, Chilal, Pir Jahania. In Balochistan province at Khost, Shahrig, Harnai, Machh, Makarwal and Degari. In Sindh province deposits of coal have also been found at Meting- Jhimper and Lakhra in Dadu districts.

The coal found in our country is of poor quality its seams are generally thin. The coal is considered of Bituminous and lignite quality. It has both high ash and sulphur content is of low heat value. About 80% of the coal found in our country is used in bricks and lime burning Kilns and some amount is used for domestic purposes.

#### Mineral Oil:

In the province of Punjab mineral oil is found at Myal, Toot, Joya Mir, Dhulian, Khur, Attock districts, Dhurnal, Rawalpindi district. In Sindh province oil is obtained from Laghari, Thora Dhabi, KhasKheli, Mazari and South Mazari in Badin district and Tando Alam of Hyderabad district. Our country is not self sufficient in the production of mineral oil and we have to import enough amount of Crude mineral oil from various countries. The imported and local crude is refined near Karachi.

#### Natural Gas:

Before 1952 no one knew about the use of natural gas in our country. It was discovered in 1952 at Sui district Sibbi in Balochistan province by Pakistan Petroleum Company Ltd., while drilling in search of oil. Besides Sui natural gas has also been found at Zin, Uch Jindran, Pir Koh and Loti. In Sindh province it is found at Khairpur Mari, Sari-Hundi and Kandhkot and natural gas is also found at Meyal, Dhodak, Dhernal and Toot in Punjab province. The present production of natural gas is fulfilling only 35.6% requirement of our country.

## Electricity:

Our country electricity is produced in three ways.

**Hydroelectricity:** In this type to produce electricity water power is used to move the diynamo or generator, that is why it is known as Hydro electricity.

**Thermal electricity:** In this type, coal, gas, or oil is used to produce electricity.

**Nuclear electricity:** In which atomic energy is used for the production of electricity is called Nuclear electricity. In our country nuclear electricity is being produced near Karachi by the help of Canadian government.

Although, all the three types of electricity are being produced in our country. The following are some important hydel projects of our country.

**Malakand Hydel Project:** This project was completed on river Swat in 1938 before independence. About 20 M.W. electricity is being supplied to Peshawar and Mardan districts of NWFP.

i) **Deragai Hydel Project:** Through an upper canal from river Swat about 20 M.W. electricity has been produced, which is being used in various industries of NWFP, it was completed in 1954.

ii) **Rasool Hydel Project:** From the canals of river Jhelum at Rasool 22 thousand M.W. electricity is being supplied to Sheikhpura and Faisalabad districts.

iii) **Warsak Hydel Project:** At about 20 miles from Peshawar a hydel project has been completed at Warsak on river Kabul. About 160 M.W. electricity is being supplied to various areas of NWFP.

iv) **Mangla Hydel Project:** A multipurpose hydel project has been completed in 1968 at Mangla on river Jhelum under Indus basin treaty. About 800 M.W. of electricity is being provided in various areas of Punjab province.

v) **Tarbela Hydel Project:** This was the biggest multipurpose hydel project of Pakistan completed in 1974 at Tarbela in Hazara district of NWFP. About 3478 M.W. electricity is being produced from this project.

(vii) **Kurram Ghari Hydel Project:** In NWFP near Kurram Ghari on the Kurram river about 90 thousand KW of electricity is being produced to fulfill the needs of Kohat and Bannu districts of NWFP. Besides the above the following thermal power stations are working in various parts of our country.

- (1) Thermal Power stations of:  
Karachi Electric Supply Company (KESC) Karachi.
- (2) Multan Thermal Stations.
- (3) Faisalabad Thermal station.
- (4) Hyderabad Thermal station.
- (5) Queta Thermal station.
- (6) Guddu Thermal station.
- (7) Sakhur Thermal station.
- (8) Kotri Thermal station.
- (9) Kot Addu Thermal station.
- (10) Pasni Thermal station.
- (11) Jamshoro Thermal station.

## Minerals of Bangladesh

Nature has provided very few mineral to Bangladesh. The quantity of minerals found in the country is not sufficient for her requirements, so to meet her needs of various types of minerals Bangladesh has to import large quantity of minerals from other countries. The following minerals are found in various parts of Bangladesh.

### 1. Natural Gas:

It is considered as the largest among the minerals found in Bangladesh. It was discovered in 1955-56 near Patharia the hilly region of Silhet district. This natural gas region is situated about, 14 miles away from Silhet city near Haripur village on the bank of Kapra river. The estimated gas deposit at this place is about 280 million cubic feet. The gas has been brought up to Dhaka, through a pipe line besides it is being used in the fertilizer factory at Fincho Ganj near Silhet.

South Asian  
Besides few deposits of natural gas have also been found near Chatak in Silhet district. It is also being used in a cement plant established near Chatak. Search for more deposits in Bangladesh is under progress.

### Coal:

Though huge deposits of lignite and peat types of coal have been found in various districts of Bangladesh, these are Farid pur, Jamal pur, Khulna, Silhet, Comela, Mymensingh, Dhaka, Denaj pur and Rang pur. Besides few deposit of inferior type of coal have also been found in Bogra district. But still the commercial production of coal has not started from any place in Bangladesh.

### Lime Stone:

There are huge deposits of lime stone near Charagadi and Thakar Ghat in district Selhet, Nawab Ganj in Rajshahi district and near Sita Kund in Chittagang hilly region. In these regions cement plants have been established, and large amount of cement is being produced from these plants.

### Silica Sand:

It is used as a raw material in glass industry. The deposits of Silica sand have been found near Taji Bazar, Naya Para and Khora near Jamal pur city in Myman Singh districts.

### Electricity:

Bangladesh electricity arrangements are under the control of Bangladesh Power Development Board. This board makes the arrangement for the supply of electricity in industrial and urban areas. In most of the areas of Bangladesh Thermal electricity is used. Thus 20 big Thermal stations at Sudhir Ganj, Bhera Mara, Golpara and Chittagang have been established. The needs of electricity in rural areas are arranged by a electrification Board. Besides a diesel thermal station at Fanchu Gang is providing electricity to the fertilizer factory.

### Hydel electricity:

#### Karnafuli Hydel Project:

It is biggest hydel project of Bangladesh have been constructed at Kaptai near Chittagang on Karnafuli river. This project was completed in 1962. About 160,000 KW of electricity is being produced from this project. The electricity has been brought from Kaptai to Dhaka through a grid line, which is producing the needs of industrial and domestic area around Dhaka. Bangladesh is self sufficient in her requirements of thermal and Hydel electricity.

## Minerals of Sri Lanka:

Few minerals are found in Sri Lanka quantity being poor, so export is not possible. The following are the minerals found in various parts of Sri Lanka.

### Diamonds and Precious stones:

Enough quantity of Diamonds and Precious stones are found in Sri Lanka. In the river valleys of Ratna pura district in South western province of Sri Lanka various kinds of precious stones are found in large quantity. These stones are exported to various countries.

### Salt:

Rock salt is not found in Sri Lanka. In Sri Lanka salt is obtained from Sea water.

**Electricity:** There is a acute shortage of power resources, coal mineral oil or natural gas are not available. So to meet shortage all these power rescues water power is being used for the production of electricity. The largest Mahawali Hydel project was completed in 1986 about 509 M.W electricity is being produced from this project.

## Minerals of Nepal

Minerals are found in very few quantity in Nepal. So Nepal has to import her required minerals from other countries.

**Mica:** It is the mineral found in enough quantity in the east of Kathmandu.

Besides few deposits of iron ore, copper, coal and marble have also been discovered in various areas.

### Hydel electricity:

Most of the rivers of Nepal comes from snow covered mountains, moving very fast with enough quantity of water. From all these rivers Hydro electricity can be produced at very low cost.

Thus on river Kosi, Karnali and Traili hydel projects have been completed with the help of Russian government. Besides India has completed a hydel project on river Gandak near Indo Nepal border.

### Mineral Oil:

Mineral Oil is not found in Nepal. Recently foreign companies are Searching for mineral oil near the border of China near Mastang and Bardya. At present Nepal is meeting her requirement from the imported mineral oil products.

## Minerals of Bhutan

ough some minerals are found in various areas of Bhutan, but due to unfavorable atic conditions their utilization is not possible. The following minerals are available hutan.

### Lime Stone:

used as a raw material is cement industry. It is mostly found in areas of Central utan.

### Gypsum:

s mineral is also used in cement industry is found in enough quantity of Pagli and ngalm areas of central Bhutan.

### Dolomite:

s found in northern areas of Bhutan and exported to India.

### Slate Stone:

central and northern areas of Bhutan, Slate stone is found in enough quantity and ostly used locally.

### Coal:

ome medium quality of coal deposits have been found in hilly areas of central Bhutan t commercial production has not started yet.

### Marble:

central and northern areas of Bhutan various types of good quality marble is rtracted, and large quantity of which is exported to India.

## Mineral in Maldives

hese are Coral Islands, and there is no important mineral found in these Island. In postal areas Salt is obtained from sea water and is consumed locally.

